

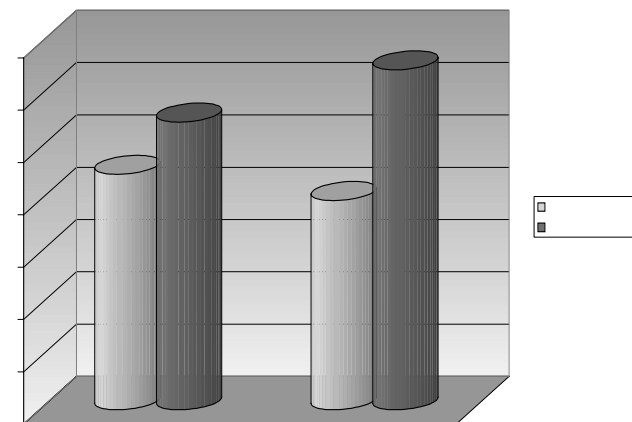
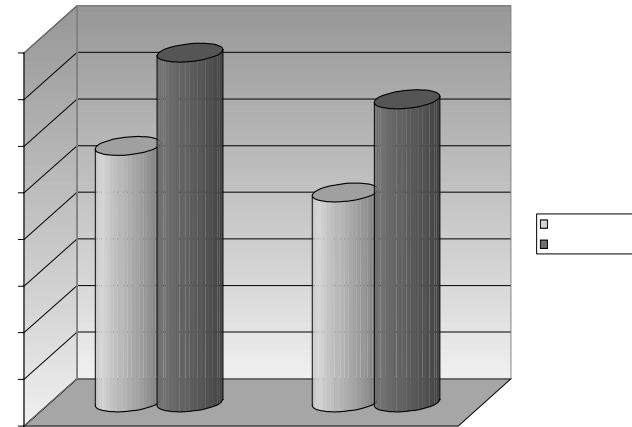
WHAT ARE THE BENEFITS OF CLEAN AIR CAR CHECK?

It is clear that the I/M program has contributed to improved air quality in Northwest and Southern Indiana. The benefits of this program combined with emission reductions from industry, improved fuel and vehicle standards and voluntary efforts have brought Clark and Floyd counties into compliance with the 1-hour health standard for ozone and have significantly improved air quality in Lake and Porter counties.

The Clean Air Car Check identifies vehicles that emit more than federal standards permit. When these vehicles are repaired, the result is cleaner air. Some of the benefits from the Clean Air Car Check can be determined by looking at test results. This can be done by comparing initial test results (both pass and fail) to final test results (either pass or fail) during a testing year. For this report, we have used test results from 1997 and 1999. The testing years of 1997 and 1999 were used in order to see the same group of vehicles in two test cycles. Since Indiana tests odd-numbered model year vehicles in odd calendar years, vehicles tested in 1997 would be tested again in 1999. (Even-numbered model year vehicles were not considered in the emission reduction calculations.)

The charts on the right show the overall percentage reductions from enhanced I/M testing for a data set of vehicles tested in 1997 and again in 1999. These results are given as a percent reduction of the emissions of HC and CO. Vehicle initial test results (both pass and fail) for vehicles tested in 1997 were compared to final test results (either pass or fail). Overall emission reductions were more in 1997 than in the 1999 test year. This is expected as a result of the carryover benefit of tests from the previous test cycle.

The charts on the right illustrate emission reductions for the same data set of vehicles by model year.



The charts on the right show the overall percentage reduction of HC and CO emissions that resulted from repairs that were required because the vehicles failed the Clean Air Car Check. Additional, unquantifiable reductions result from vehicles that are tuned up before the vehicle owner brings it into be tested.

The data show that I/M is more effective on older vehicles. 1991 and older vehicles have higher emission reductions that can be attributed to increased effectiveness of I/M on vehicles with higher deterioration of emission controls. We would expect to see this trend in the 1981-1989 model years due to improved reduction technology introduced in 1991 model year vehicles.

